

IN THE UNITED STATES DISTRICT COURT
IN AND FOR THE DISTRICT OF SOUTH CAROLINA
COLUMBIA DIVISION

CA NO. 3:05-CV-02858-MJP

UNITED STATES OF AMERICA, ex rel.,)
MICHAEL K. DRAKEFORD, M.D.,)
)
Plaintiffs,)
)
v.)
)
)
TUOMEY d/b/a TUOMEY HEALTHCARE)
SYSTEM, INC.)
)
Defendant.)

DECLARATION OF RUBEN STECK

I, Ruben Steck, being over eighteen years of age and otherwise competent to testify, do depose and state as follows based upon my personal knowledge:

1. I am an owner of Steck Consulting, LLC. I was engaged by the United States in this case to analyze certain records of claims submitted to, and paid by, the Medicare program in connection with services provided by defendant Tuomey and several physicians who had contracts with Tuomey. The details of my analysis and the methodology I used are set out in two reports, the first dated March 16, 2009 and the second dated November 16, 2009. Both reports are attached to this declaration as Exhibits B and C.

2. On November 3, 2009, I received a disk containing claims records that I understood had been provided by Tuomey to the Department of Justice ("DOJ") in

response to DOJ's requests and a telephone conference on July 10, 2009, with Tuomey's counsel and hospital personnel in which I participated in order to discuss the format, fields and parameters of the records DOJ needed from Tuomey. The disk arrived from Tuomey too late for me to review before DOJ's deadline of November 17, 2009 for me to update and supplement my March 16, 2009 report.

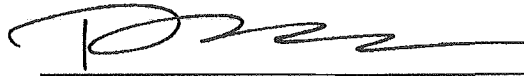
3. After my supplemental report had been completed, I examined the records provided by Tuomey on the disk. I noticed that for several months, the number of claims records appeared abnormally low. The number of records for these time periods also did not correspond to the claims records I had received for the same time periods from Federal Government sources. I am unable to determine why Tuomey's disk contains such unexpectedly low numbers of records for these time periods. A graph is attached hereto as Exhibit A showing the unexplained dip in claims records for certain time periods.

4. Additionally, I understood from the telephone conference in which I participated that Tuomey would supply records not only for institutional (*i.e.*, hospital) claims to Medicare, but also would supply the claims records submitted to, and paid by, Medicare on behalf of the physicians with whom Tuomey had contracts for their services. The records submitted and paid on behalf of the physicians were not provided on the disk. Accordingly, I am not able to compare Tuomey's records for the

physician services with those provided by Federal Government sources for the periods and services in question in this case.

I hereby certify under penalty of perjury that the foregoing is true and correct to the best of my knowledge, information and belief.

Dated: 1/21/2010



Ruben Steck

Exhibit A
Monthly Medicare Claim Counts
 CMS-Provided vs. Tuomey-Provided

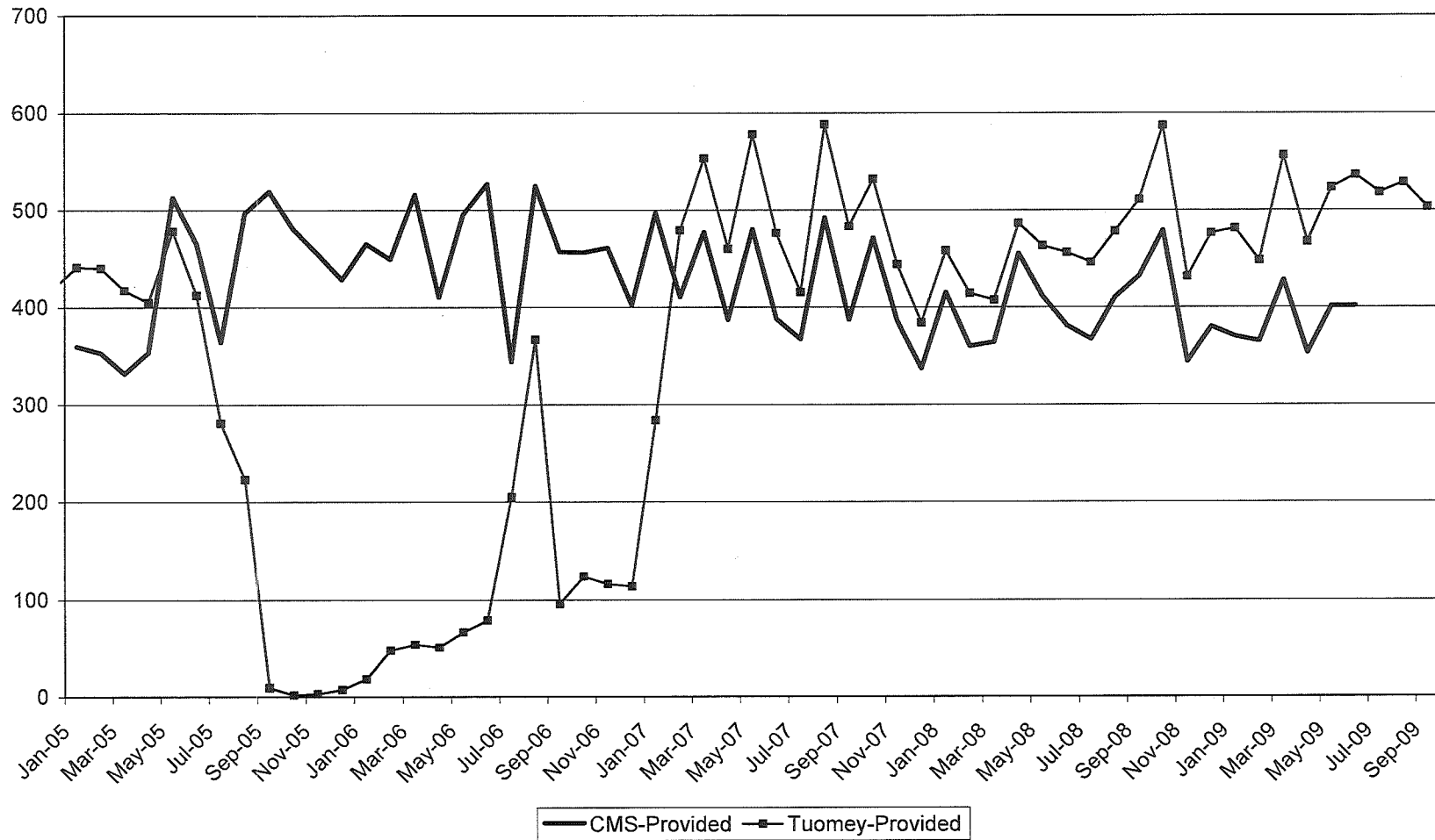


EXHIBIT A

Report of Steck Consulting, LLC

**United States of America, ex rel.,
Michael K. Drakeford, M.D.,**

v.

Tuomey Healthcare System, Inc.

March 16, 2009

EXHIBIT B

I. Introduction

In November 2007, Steck Consulting, LLC was contacted by Department of Justice attorneys to discuss the analysis of Medicare and Medicaid hospital claims submitted by Tuomey Healthcare System, Inc. (Tuomey). The attorneys provided us with a list of physicians and asked us to identify specific Tuomey hospital claims related to the physicians. These physicians had part-time employment contracts with physician practice groups owned by Tuomey.

We were asked first to identify hospital claims for services provided by Tuomey on the same date (and for the same patients) as services provided directly by the physicians working for the Tuomey-owned groups under the part-time employment contracts. We understood from the attorneys that these hospital claims were for services that would not have been performed by Tuomey if the physicians had provided their services at a different, non-Tuomey facility. We also understood from the attorneys that Tuomey had established the hospital-based physician practice groups and encouraged the physicians to enter into part-time employment contracts to ensure that the physicians continued to provide their services at Tuomey rather than establishing their own facilities. We were asked to develop a method to identify and quantify these claims to show the potential loss to Tuomey had the physicians not performed their services at the Tuomey facility.

We were also asked to identify all Tuomey claims that explicitly indicated that at least one of the physicians with part-time employment contracts had played a role in the medical care provided by the hospital. We understood that these claims were submitted in violation of federal laws and that the claims (and the amounts reimbursed for them)

would be used as a factor in the government's damage calculations. We were asked to develop a method to identify and quantify these claims as well.

This report describes the data we used in our analysis, the details of our analytic methods and our results.

II. Data Considered

All analyses described in this report were based on the following data sets and information:

A. Medicare Claims Data

On December 26, 2007, Steck Consulting received a CD from TriCenturion, a Medicare contractor, containing Tuomey Medicare hospital claims and the Medicare claims for services provided by the physicians with part-time employment agreements. These Medicare records are for claims with payment dates from January 9, 2003 through November 30, 2007.

B. Medicaid Claims Data

On November 21, 2007, Steck Consulting received a CD from U.S. Department of Justice trial attorney Tracy Hilmer, containing Tuomey Medicaid hospital claims and the Medicaid claims for services provided by the physicians with part-time employment agreements. These Medicaid records are for claims with payment dates from January 14, 2005 through September 28, 2007.

C. Additional Information

Steck Consulting received additional communications from the

Department of Justice identifying individual physicians and their Medicare and Medicaid provider IDs, the Tuomey-owned physician practice groups (and associated Medicare and Medicaid IDs) with which they had part-time employment contracts, and the dates of the physicians' entry into employment agreements with the practice groups. This information is summarized in Attachment A. We were also provided with a copy of the government's initial disclosure submitted May 28, 2008 and the government's second amended complaint filed November 12, 2008.

Upon receipt of the CDs, we verified and validated the Medicare and Medicaid claims data. Among other steps, we ensured that the data represented hospital claims for Tuomey and physician claims for the physicians identified in Attachment A and contained the data fields and values required to perform the requested analyses.

III. Analytic Approach

As stated above, we received Medicare and Medicaid hospital claims for services provided by Tuomey as well as claims for services performed by the individual physicians with part-time employment contracts. To be reimbursed by Medicare and Medicaid, physicians, hospitals and other healthcare providers must submit claims for payment. These claims for payment identify the provider (in this case the hospital or a physician and his or her practice group), the patient, the dates of service, and other information related to the service as well as information required to process and pay the claim. The Medicare and Medicaid programs process these records of service, adding

information related to the processing of the claim, including the amount paid for the claim. These data elements, along with the list of physicians, their practice groups and the starting dates of their contracts, form the basis of our analyses.

A. Medicare Analysis

1. Practice Group-Related Tuomey Hospital Claim Analysis

As stated in the introduction, we were asked to identify Tuomey hospital claims for services provided on the same date as services provided by the physicians acting under part-time employment contracts. To perform this analysis, we considered every Tuomey out-patient, single-date-of-service hospital claim in turn. Because hospital and physician claims both indicate the patient and the date of service in the same way, we were able to identify every hospital claim that had a matching physician service for the same patient on the same date. To ensure that any matching physician claims were for services provided by physicians acting under part-time employment contracts, we limited each physician's claims to those indicating a Toumey-owned practice group and occurring on or after the starting date of the physician's contract.

We were asked to summarize the number of hospital claims identified in this manner and the amounts paid for them and to group these results by year and by physician and practice group. To ensure reproducibility and to ensure that each Tuomey hospital claim is counted only once and properly associated with one and only one physician and practice group, we had to consider and account for the possibility that more than one physician with an active part-time contract could provide services on the same date as the hospital's service. In these instances we chose the physician with the ID

occurring first when the IDs are sorted in ASCII order. In this way, each matching hospital claim was associated with one and only one physician and practice group.

Table I and Table II, below, show the paid amounts and claim counts, respectively, for all Tuomey hospital claims identified in the manner described above. The results are grouped by year, by the associated physicians, and by the physician practice group with which each physician had a part-time contract. In total, during the period for which we received data, there were 8,497 hospital claims identified in this manner for which Tuomey was paid \$4,481,982. Of those, there were 8,490 claims for service that identified an attending physician with an active employment contract and for which Tuomey was paid \$4,478,805.

2. Physician-Related Toumey Hospital Claim Analysis

As stated in the introduction, we were also asked to develop a method to identify Tuomey hospital claims directly associated with the physicians having part-time employment contracts, whether the physician provided services under their contracts or not. This analysis relied on two data fields in the hospital claims that identify the attending and operating physicians associated with the services provided by the hospital. We considered each Tuomey hospital claim in turn and determined whether the attending and/or operating physician had an active contract at the time of the hospital service.

We were asked to summarize the number of hospital claims identified in this manner and the amounts paid for them and to group these results by year and by physician and practice group. To ensure reproducibility and to ensure that each Tuomey hospital claim is counted only once and is properly associated with one and only one

physician and practice group, we had to consider the possibility that the claim could identify different attending and operating physicians. In the instances where the attending and operating physicians were different but both had active contracts, we chose the attending physician for purposes of grouping the claim counts and paid amounts.

Table III and Table IV, below, show the paid amounts and claim counts, respectively, for all hospital claims identified in this manner grouped by year, physician and practice group. In total, during the period for which we received data, there were 16,982 hospital claims identified in this manner for which Tuomey was paid \$26,992,118. Of those, there were 14,923 claims for which Tuomey was paid \$11,071,211 for which the attending physician had an active employment contract.

B. Medicaid Analysis

3. Practice Group-Related Tuomey Hospital Claim Analysis

To identify Tuomey Medicaid claims for hospital services provided on the same date as Medicaid services provided by the physicians having part-time employment contracts, we used the Medicaid data elements corresponding to the data elements used in our Medicare data analysis. As with our Medicare analysis, we first considered each Tuomey out-patient, single-date-of-service hospital Medicaid claim in turn. For each hospital claim, we then identified all physician Medicaid claims for the same patient performed by physicians with active contracts on the same date as the hospital claim and which identify the Tuomey-based practice group. We used the same approach as in our Medicare analysis to account for the possibility that more than one physician may have provided services on the same date. We again ensured that each identified hospital claim

was counted only once and was associated with one and only one physician with an active part-time contract.

Table V and Table VI, below, show the paid amounts and claim counts, respectively, for all hospital claims identified in this manner grouped by year, physician and practice group. In total, during the period for which we received data, there were 1,322 hospital claims identified in this manner for which Tuomey was paid \$497,767.

4. Physician-Related Toumey Hospital Claim Analysis

Because Medicaid hospital claims do not indicate an attending or operating physician, we were unable to perform an analysis equivalent to our second Medicare analysis.

IV. Results

Practice Group-Related Hospital Medicare Payments

Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	142,754	138,289	98,839	379,883
	Kent Cunningham	180,220	170,912	181,366	532,499
	Scott R. McDuffie	226,118	250,141	203,059	679,319
	Ted Williams	179,696	188,522	167,672	535,890
Tuomey Gastroenterology Total		728,788	747,865	650,937	2,127,590
Tuomey OB/GYN	Helen Latham	7	818	1,536	2,361
	John Britton	1,801		1,245	3,046
	Murrell Smith	768			768
	Tessa Kincade		2,205		2,205
Tuomey OB/GYN Total		2,576	3,023	2,781	8,379
Tuomey Ophthalmology	James Goodson	556,028	633,379	482,426	1,671,833
Tuomey Ophthalmology Total		556,028	633,379	482,426	1,671,833
Tuomey Surgical	Hans Brings	19,144	34,507	27,766	81,417
	Henry P. Moses	50,127	99,370	66,992	216,489
	James W. Ellett	19,184	11,988	3,177	34,349
	Jon Stanford	24,044	57,556	37,251	118,851
	Mark M. Crabbe	66,757	58,191	58,170	183,118
	Steven C. Lauzon		3,335	36,620	39,955
Tuomey Surgical Total		179,257	264,947	229,976	674,180
Total		1,466,648	1,649,215	1,366,119	4,481,982

Table I - Practice Group-Related Hospital Medicare Payments

Practice Group-Related Hospital Medicare Claim Counts

Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	397	364	235	996
	Kent Cunningham	494	439	397	1,330
	Scott R. McDuffie	564	579	451	1,594
	Ted Williams	499	512	424	1,435
Tuomey Gastroenterology Total		1,954	1,894	1,507	5,355
Tuomey OB/GYN	Helen Latham	1	1	2	4
	John Britton	2		2	4
	Murrell Smith	1			1
	Tessa Kincade		1		1
Tuomey OB/GYN Total		4	2	4	10
Tuomey Ophthalmology	James Goodson	856	915	683	2,454
Tuomey Ophthalmology Total		856	915	683	2,454
Tuomey Surgical	Hans Brings	10	18	16	44
	Henry P. Moses	55	96	80	231
	James W. Ellett	25	11	2	38
	Jon Stanford	30	59	36	125
	Mark M. Crabbe	74	64	63	201
	Steven C. Lauzon		3	36	39
Tuomey Surgical Total		194	251	233	678
Total		3,008	3,062	2,427	8,497

Table II - Practice Group-Related Hospital Medicare Claim Counts

Physician-Related Hospital Medicare Payments

Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	826,641	1,011,567	686,189	2,524,396
	Kent Cunningham	969,832	951,641	807,054	2,728,528
	Scott R. McDuffie	1,112,726	1,028,123	792,003	2,932,853
	Ted Williams	430,512	317,466	337,661	1,085,639
Tuomey Gastroenterology Total		3,339,712	3,308,797	2,622,906	9,271,415
Tuomey OB/GYN	Barney Williams	10,959	24,353	9,924	45,235
	Helen Latham	61,197	68,318	24,819	154,334
	John Britton	15,686	16,515	10,702	42,903
	Murrell Smith	43,669	6,348	11,176	61,193
	Samuel Riddle	40,390	19,617	11,375	71,382
	Tessa Kincade	25,999	8,316	10,883	45,198
	Thomas Hepfer	36,147	16,130	55,571	107,849
Tuomey OB/GYN Total		234,047	159,596	134,451	528,094
Tuomey Ophthalmology	James Goodson	568,376	652,142	502,239	1,722,758
Tuomey Ophthalmology Total		568,376	652,142	502,239	1,722,758
Tuomey Surgical	Hans Brings	898,621	1,699,646	1,339,932	3,938,199
	Henry P. Moses	576,318	1,011,339	788,964	2,376,621
	James W. Ellett	654,940	260,377		915,317
	Jon Stanford	906,119	1,224,345	1,157,104	3,287,567
	Mark M. Crabbe	1,226,079	1,440,581	1,425,749	4,092,410
	Steven C. Lauzon		68,553	791,184	859,737
Tuomey Surgical Total		4,262,077	5,704,841	5,502,933	15,469,850
Total		8,404,212	9,825,376	8,762,530	26,992,118

Table III - Physician-Related Hospital Medicare Payments

Physician-Related Hospital Medicare Claim Counts

Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	611	600	418	1,629
	Kent Cunningham	827	793	688	2,308
	Scott R. McDuffie	972	1,041	790	2,803
	Ted Williams	644	651	548	1,843
Tuomey Gastroenterology Total		3,054	3,085	2,444	8,583
Tuomey OB/GYN	Barney Williams	178	179	77	434
	Helen Latham	185	155	107	447
	John Britton	91	111	70	272
	Murrell Smith	112	98	71	281
	Samuel Riddle	88	62	43	193
	Tessa Kincade	64	37	44	145
	Thomas Hepfer	84	62	21	167
Tuomey OB/GYN Total		802	704	433	1,939
Tuomey Ophthalmology	James Goodson	886	940	730	2,556
Tuomey Ophthalmology Total		886	940	730	2,556
Tuomey Surgical	Hans Brings	148	432	334	914
	Henry P. Moses	263	385	365	1,013
	James W. Ellett	126	86		212
	Jon Stanford	198	249	197	644
	Mark M. Crabbe	299	330	318	947
	Steven C. Lauzon		9	165	174
Tuomey Surgical Total		1,034	1,491	1,379	3,904
Total		5,776	6,220	4,986	16,982

Table IV - Physician-Related Hospital Medicare Claim Counts

Practice Group-Related Hospital Medicaid Payments


Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	46,659	39,695	28,858	115,212
	Kent Cunningham	16,974	14,948	13,586	45,508
	Scott R. McDuffie	46,510	29,964	17,963	94,438
	Ted Williams	13,028	18,321	7,718	39,067
Tuomey Gastroenterology Total		123,170	102,928	68,125	294,224
Tuomey OB/GYN	Helen Latham	1,050	1,400	1,750	4,200
	John Britton	570	1,933	350	2,853
	Murrell Smith	1,776	1,620	1,725	5,121
	Samuel Riddle			1,400	1,400
	Tessa Kincade	1,750	3,720	1,453	6,923
	Thomas Hepfer	2,540	1,270	700	4,510
Tuomey OB/GYN Total		7,686	9,943	7,378	25,007
Tuomey Ophthalmology	James Goodson	27,443	48,790	20,855	97,088
Tuomey Ophthalmology Total		27,443	48,790	20,855	97,088
Tuomey Surgical	Hans Brings	570	1,840	350	2,760
	Henry P. Moses	10,510	13,305	6,920	30,735
	James W. Ellett	1,840	2,015		3,855
	Jon Stanford	5,593	10,479	8,145	24,217
	Mark M. Crabbe	4,822	9,810	4,425	19,057
	Steven C. Lauzon			825	825
Tuomey Surgical Total		23,334	37,449	20,665	81,448
Total		181,634	199,109	117,024	497,767

Table V - Practice Group-Related Hospital Medicaid Payments

Practice Group-Related Hospital Medicaid Claim Counts					
Group	Physician	2005	2006	2007	Grand Total
Tuomey Gastroenterology	Floyd Angus	132	98	71	301
	Kent Cunningham	46	36	29	111
	Scott R. McDuffie	123	63	36	222
	Ted Williams	44	40	19	103
Tuomey Gastroenterology Total		345	237	155	737
Tuomey OB/GYN	Helen Latham	3	4	5	12
	John Britton	1	3	1	5
	Murrell Smith	6	4	4	14
	Samuel Riddle			4	4
	Tessa Kincade	5	10	4	19
	Thomas Hepfer	6	3	2	11
Tuomey OB/GYN Total		21	24	20	65
Tuomey Ophthalmology	James Goodson	110	155	58	323
Tuomey Ophthalmology Total		110	155	58	323
Tuomey Surgical	Hans Brings	1	4	1	6
	Henry P. Moses	25	33	16	74
	James W. Ellett	4	4		8
	Jon Stanford	15	26	19	60
	Mark M. Crabbe	14	23	9	46
	Steven C. Lauzon			3	3
Tuomey Surgical Total		59	90	48	197
		535	506	281	1,322

Table VI - Practice Group-Related Hospital Medicaid Payments

Respectfully submitted,



Ruben Steck

3/16/2009
Date

Attachment A – Physician List

Group Name	Medicare Group ID	Medicaid Group ID	Physician Name	Medicare Physician ID	Medicare Physician ID	Contract Date
Tuomey Gastroenterology			Floyd Angus			1/1/2005
			Kent Cunningham			1/1/2005
			Scott R. McDuffie			1/1/2005
			Ted Williams			1/1/2005
Tuomey OB/GYN			Barney Williams			1/1/2005
			Helen Latham			1/1/2005
			John Britton			1/1/2005
			Murrell Smith			1/1/2005
			Samuel Riddle			1/1/2005
			Tessa Kincade			1/1/2005
			Thomas Hepfer			1/1/2005
Tuomey Ophthalmology			James Goodson			1/1/2005
Tuomey Surgical			Hans Brings			9/1/2005
			Henry P. Moses			5/1/2005
			James W. Ellett			5/1/2005
			Jon Stanford			5/1/2005
			Mark M. Crabbe			5/1/2005
			Steven C. Lauzon			11/15/2006

Attachment B – Curriculum Vitae

Ruben Steck
Steck Consulting, LLC

1730 Rhode Island Ave, NW, Suite 200
 Washington, DC 20036
 (202) 887-0190
 rsteck@steckconsulting.com

Experience

Over twenty years experience providing innovative algorithmic and methodological solutions to clients' complex and large-scale data analysis challenges. Expertise in fraud and abuse detection and analysis for government and private health insurers, link analysis for law enforcement, defense and intelligence clients, and pattern analysis for financial, retail, and telecommunications clients. Expertise in developing parallel and distributed processing solutions using diverse methods such as graph-theoretic pattern detection and analysis, trend analysis, simulation, and modeling. Expertise in combining, integrating, and synchronizing large data sets from diverse sources to provide richer insights into clients' data. Expertise in presenting results of complex analyses in a variety of easy to understand graphical formats.

Employment

President
 Steck Consulting, LLC 1991 - Present

- Providing custom consulting and data analysis services to a wide range of commercial and government clients. Performing large-scale data analysis to identify, classify, quantify, model and predict complex behavioral patterns across multiple large (multi-billion record) databases from diverse sources. Performing statistical and graph-theoretic analysis and modeling of the complex interactions of associated entities. Presenting complex analytic results in forms useful to consumers with little computer or data analysis experience. Maintaining and administering multi-terabyte parallel processing hardware and software systems to provide clients with high scalability and rapid turnaround times.
- Providing analysis services for the detection and prosecution of healthcare fraud and abuse. Services include complex pattern detection, statistical analysis, link-analysis, and damage/recovery calculations. Projects include large civil and criminal Medicare, Medicaid, and private sector cases with recoveries approaching \$2 billion.
- Providing software and analysis support to U.S defense and intelligence clients. Diverse projects include development of multi-terabyte linked transaction data for a national law enforcement test bed; multi-spectral image processing software for target detection and recognition; large-scale text search and pattern matching tools.
- Providing software and consulting services to commercial clients. Projects include algorithm design and development for a large international data services firm's multi-terabyte parallel data processing system. Services include large-scale population segmentation, modeling and risk management for financial, retail and telecommunications clients.

Partner, Manager of Analytic Services
 Sector Analytics, LLC 1996 – 1997

- Developed and implemented link analysis and pattern scoring algorithms for the detection of health care fraud and abuse. Responsible for interpreting commercial and government clients' fraud detection and reduction requirements and formulating, managing and implementing appropriate system solutions.

- Managed contracts to identify and characterize potential cases of fraud and abuse within public and private health care programs. Assisted clients in establishing investigative priorities by estimating potential financial recoveries.
- Designed and implemented scalable pattern detection and analysis software supporting very large databases. Developed graph-theoretic cluster detection and link analysis algorithms, propagative scoring techniques, temporal analysis schemes, and statistical behavior characterization tools.

Member of the Technical Staff
MRJ, Inc.

1987-1991

- Responsible for algorithm design and software development in a wide variety of applications of massively parallel supercomputers, traditional vector supercomputers, and a variety of special purpose systems for intelligence community, defense, and other classified government clients.
- Led team in the design and development of parallel algorithms and coordinated integration of parallel modules into large-scale database analysis system. Designed pattern detection and link analysis tools for large database containing complex relationships.
- Designed and developed tools for fine-grained parallel scientific computation including statistical analysis, genetic algorithms, simulated annealing, and Monte Carlo modeling for optical, electromagnetic, image processing, segmentation and classification, target recognition, and other application areas.
- As Principal Investigator on Scientific Visualization R&D project, developed tools to easily view and manipulate multi-million point FFTs and other large-scale signal data. Developed real-time, three-dimensional scene rendering software for polygonal and volumetric data.
- As Principal Investigator on stereo image analysis project, designed and developed image processing algorithms to analyze aerial stereo imagery of urban terrain to create three-dimensional topographic models of the scene.

Education

B.S., Computer Information Systems, George Washington University, 1987

Attachment C - List of Cases as Expert

I have testified as a summary witness in the following case:

United States v. Peter Rogan, et al.

Attachment D – Statement of Compensation

Under contract to the Department of Justice, to support this analysis, Steck Consulting, LLC has invoiced at the following rates:

<u>Labor Category</u>	<u>10/1/2007-9/30/2008</u>	<u>10/1/2008-9/30/2009</u>
Senior Analyst IV	\$187.20 per hour	\$197.60 per hour
Senior Analyst V	\$196.56 per hour	\$207.48 per hour

To date, Steck Consulting, LLC has submitted invoices totaling \$118,091.74.

Updated Report of Steck Consulting, LLC

United States of America, ex rel.,
Michael K. Drakeford, M.D.,
v.
Tuomey Healthcare System, Inc.

November 16, 2009



SteckConsulting_000691

EXHIBIT C

I. Introduction

In October 2009, Steck Consulting, LLC was asked by Department of Justice attorneys to update our March 16, 2009 report using recently available Medicare data covering approximately two additional years beyond the data we used in our earlier report. This report describes the data we used in our analysis, the details of our analytic methods and our results.

In November 2007, Steck Consulting, LLC was contacted by Department of Justice attorneys to discuss the analysis of Medicare and Medicaid hospital claims submitted by Tuomey Healthcare System, Inc. (Tuomey). The attorneys provided us with a list of physicians and asked us to identify specific Tuomey hospital claims related to the physicians. These physicians had part-time employment contracts with physician practice groups owned by Tuomey.

As with our report dated March 16, 2009, we were asked to identify hospital claims for services provided by Tuomey on the same date (and for the same patients) as services provided directly by the physicians working for the Tuomey-owned groups under the part-time employment contracts. We understood from the attorneys that these hospital claims were for services that would not have been performed by Tuomey if the physicians had provided their services at a different, non-Tuomey facility. We also understood from the attorneys that Tuomey had established the hospital-based physician practice groups and encouraged the physicians to enter into part-time employment contracts to ensure that the physicians continued to provide their services at Tuomey rather than establishing their own facilities. We were asked to develop a method to

identify and quantify these claims to show the potential loss to Tuomey had the physicians not performed their services at the Tuomey facility.

We were also asked to identify all Tuomey claims that explicitly indicated that at least one of the physicians with part-time employment contracts had played a role in the medical care provided by the hospital. We understood that these claims were submitted in violation of federal laws and that the claims (and the amounts reimbursed for them) would be used as a factor in the government's damage calculations. We were asked to develop a method to identify and quantify these claims as well.

II. Data Considered

All analyses described in this report were based on the following data sets and information:

A. Medicare Claims Data

On October 27, 2009, Steck Consulting received a DVD from Acumen LLC, a Medicare contractor, containing updated Tuomey Medicare hospital claims and the Medicare claims for services provided by the physicians with part-time employment agreements. These Medicare records are for claims with payment dates from January, 2003 through June, 2009.

B. Additional Information

Steck Consulting received additional communications from the Department of Justice identifying individual physicians and their Medicare and Medicaid provider IDs, the Tuomey-owned physician practice groups (and associated Medicare and Medicaid IDs) with which they had part-

time employment contracts, and the dates of the physicians' entry into employment agreements with the practice groups. This information is summarized in Attachment A. We were also provided with a copy of the government's initial disclosure submitted May 28, 2008 and the government's second amended complaint filed November 12, 2008.

Upon receipt of the DVD, we verified and validated the Medicare claims data. Among other steps, we ensured that the data represented hospital claims for Tuomey and physician claims for the physicians identified in Attachment A and contained the data fields and values required to perform the requested analyses.

III. Analytic Approach

As stated above, we received hospital claims for services provided by Tuomey as well as claims for services performed by the individual physicians with part-time employment contracts. To be reimbursed by Medicare or Medicaid, physicians, hospitals and other healthcare providers must submit claims for payment. These claims for payment identify the provider (in this case the hospital or a physician and his or her practice group), the patient, the dates of service, and other information related to the service as well as information required to process and pay the claim. The Medicare and Medicaid programs process these records of service, adding information related to the processing of the claim, including the amount paid for the claim. These data elements, along with the list of physicians, their practice groups and the starting dates of their contracts, form the basis of our analyses.

A. Medicare Analysis

1. Practice Group-Related Tuomey Hospital Claim Analysis

As stated in the introduction, we were asked to identify Tuomey hospital claims for services provided on the same date as services provided by the physicians acting under part-time employment contracts. To perform this analysis, we considered every Tuomey out-patient, single-date-of-service hospital claim in turn. Because hospital and physician claims both indicate the patient and the date of service in the same way, we were able to identify every hospital claim that had a matching physician service for the same patient on the same date. To ensure that any matching physician claims were for services provided by physicians acting under part-time employment contracts, we limited each physician's claims to those indicating a Toumey-owned practice group and occurring on or after the starting date of the physician's contract.

We were asked to summarize the number of hospital claims identified in this manner and the amounts paid for them and to group these results by federal fiscal year (October 1 – September 30) and by physician and practice group. To ensure reproducibility and to ensure that each Tuomey hospital claim is counted only once and properly associated with one and only one physician and practice group, we had to consider and account for the possibility that more than one physician with an active part-time contract could provide services on the same date as the hospital's service. In these instances we chose the physician with the ID occurring first when the IDs are sorted in ASCII order. In this way, each matching hospital claim was associated with one and only one physician and practice group.

Table I and Table II, below, show the paid amounts and claim counts, respectively, for all Tuomey hospital claims identified in the manner described above. The results are grouped by fiscal year, by the associated physicians, and by the physician practice group with which each physician had a part-time contract. In total, during the period for which we received data, there were 13,020 hospital claims identified in this manner for which Tuomey was paid \$7,359,304. Of those, there were 13,010 claims for service that identified an attending physician with an active employment contract and for which Tuomey was paid \$7,353,397.

2. Physician-Related Tuomey Hospital Claim Analysis

As stated in the introduction, we were also asked to develop a method to identify Tuomey hospital claims directly associated with the physicians having part-time employment contracts, whether the physician provided services under their contracts or not. This analysis relied on two data fields in the hospital claims that identify the attending and operating physicians associated with the services provided by the hospital. We considered each Tuomey hospital claim in turn and determined whether the attending and/or operating physician had an active contract at the time of the hospital service.

We were asked to summarize the number of hospital claims identified in this manner and the amounts paid for them and to group these results by fiscal year and by physician and practice group. To ensure reproducibility and to ensure that each Tuomey hospital claim is counted only once and is properly associated with one and only one physician and practice group, we had to consider the possibility that the claim could identify different attending and operating physicians. In the instances where the

attending and operating physicians were different but both had active contracts, we chose the attending physician for purposes of grouping the claim counts and paid amounts.

Table III and Table IV, below, show the paid amounts and claim counts, respectively, for all hospital claims identified in this manner grouped by fiscal year, physician and practice group. In total, during the period for which we received data, there were 25,973 hospital claims identified in this manner for which Tuomey was paid \$44,888,651. Of those, there were 22,822 claims for which Tuomey was paid \$18,514,253 for which the attending physician had an active employment contract.

B. Medicaid Analysis

For this updated report, we were not asked to analyze Medicaid claims data.

IV. Results

		Practice Group-Related Hospital Medicare Payments					
		Fiscal Year					
Group	Physician	2005	2006	2007	2008	2009	Grand Total
Tuomey Gastroenterology	Floyd Angus	112,387	146,789	112,151	104,171	94,074	569,574
	Kent Cunningham	137,141	172,862	209,944	200,250	183,431	903,627
	Scott R. McDuffie	175,739	247,236	237,772	218,877	173,169	1,052,794
	Ted Williams	136,764	196,920	190,557	171,786	134,256	830,283
Tuomey Gastroenterology Total		562,032	763,808	750,424	695,084	584,929	3,356,278
Tuomey OB/GYN	Helen Latham	378	818	1,536	1,866	1,805	6,403
	John Britton	1,047	754	1,245	505		3,551
	Murrell Smith	768			907		1,675
	Samuel Riddle					913	913
	Tessa Kincade			2,205			2,205
Tuomey OB/GYN Total		2,193	1,572	4,985	3,278	2,717	14,745
Tuomey Ophthalmology	James Goodson	444,013	610,291	574,832	658,708	556,592	2,844,436
Tuomey Ophthalmology Total		444,013	610,291	574,832	658,708	556,592	2,844,436
Tuomey Surgical	Hans Brings	4,708	23,327	49,089	74,564	40,857	192,546
	Henry P. Moses	23,797	99,848	94,270	98,831	76,015	392,761
	James W. Ellett	15,582	15,590	3,177	12,760	8,364	55,473
	Jon Stanford	18,567	49,954	49,079	72,462	25,379	215,441
	Mark M. Crabbe	47,139	65,659	66,665	71,355	35,320	286,138
	Steven C. Lauzon			1,486			1,486
Tuomey Surgical Total		109,793	254,378	263,767	329,973	185,935	1,143,845
Grand Total		1,118,031	1,630,049	1,594,008	1,687,043	1,330,173	7,359,304

Table I - Practice Group-Related Hospital Medicare Payments

		Practice Group-Related Hospital Medicare Claim Counts					
Group	Physician	Fiscal Year					Grand Total
		2005	2006	2007	2008	2009	
Tuomey Gastroenterology	Floyd Angus	311	395	271	253	211	1,441
	Kent Cunningham	375	451	481	452	359	2,118
	Scott R. McDuffie	439	579	535	468	334	2,355
	Ted Williams	383	532	490	410	290	2,105
Tuomey Gastroenterology Total		1,508	1,957	1,777	1,583	1,194	8,019
Tuomey OB/GYN	Helen Latham	1	1	2	2	2	8
	John Britton	1	1	2	1		5
	Murrell Smith	1			1		2
	Samuel Riddle					1	1
	Tessa Kincade			1			1
Tuomey OB/GYN Total		3	2	5	4	3	17
Tuomey Ophthalmology	James Goodson	693	888	803	879	668	3,931
Tuomey Ophthalmology Total		693	888	803	879	668	3,931
Tuomey Surgical	Hans Brings	2	14	26	37	19	98
	Henry P. Moses	29	99	104	99	69	400
	James W. Ellett	20	16	2	6	4	48
	Jon Stanford	23	52	46	59	24	204
	Mark M. Crabbe	53	73	72	71	32	301
	Steven C. Lauzon			2			2
Tuomey Surgical Total		127	254	252	272	148	1,053
Grand Total		2,331	3,101	2,837	2,738	2,013	13,020

Table II - Practice Group-Related Hospital Medicare Claim Counts

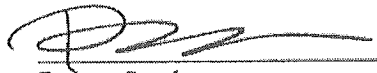
		Physician-Related Hospital Medicare Payments					
		Fiscal Year					Grand Total
Group	Physician	2005	2006	2007	2008	2009	
Tuomey Gastroenterology	Floyd Angus	507,836	1,127,887	853,014	877,721	567,164	3,933,622
	Kent Cunningham	674,270	1,028,252	947,404	984,089	703,357	4,337,371
	Scott R. McDuffie	803,847	1,112,787	1,012,634	1,032,630	694,355	4,656,253
	Ted Williams	382,873	303,489	356,346	321,453	181,397	1,545,557
Tuomey Gastroenterology Total		2,368,825	3,572,415	3,169,398	3,215,893	2,146,273	14,472,803
Tuomey OB/GYN	Barney Williams	9,748	15,037	19,597	10,389	11,159	65,931
	Helen Latham	46,481	69,073	31,637	66,779	43,380	257,350
	John Britton	13,134	17,474	10,221	18,569	16,978	76,376
	Murrell Smith	38,698	9,453	13,034	17,093	4,317	82,594
	Samuel Riddle	36,515	21,173	10,417	24,311	12,433	104,849
	Tessa Kincade	25,215	6,397	15,777	4,538		51,927
	Thomas Hepfer	30,287	19,339	58,053	20,444	1,599	129,721
Tuomey OB/GYN Total		200,077	157,945	158,736	162,123	89,867	768,747
Tuomey Ophthalmology	James Goodson	451,769	624,136	585,429	676,801	565,881	2,904,016
Tuomey Ophthalmology Total		451,769	624,136	585,429	676,801	565,881	2,904,016
Tuomey Surgical	Hans Brings	203,101	1,909,204	1,746,635	1,864,240	1,554,545	7,277,725
	Henry P. Moses	377,233	1,017,704	913,671	813,948	920,084	4,042,641
	James W. Ellett	411,324	523,032	70			934,425
	Jon Stanford	672,183	1,217,738	1,299,306	1,330,663	844,304	5,364,193
	Mark M. Crabbe	891,074	1,290,068	1,796,935	1,553,068	1,374,496	6,905,640
	Steven C. Lauzon			755,984	797,233	665,244	2,218,461
Tuomey Surgical Total		2,554,915	5,957,746	6,512,601	6,359,151	5,358,672	26,743,085
Grand Total		5,575,586	10,312,241	10,426,164	10,413,968	8,160,693	44,888,651

Table III - Physician-Related Hospital Medicare Payments

		Physician-Related Hospital Medicare Claim Counts					
		Fiscal Year					
Group	Physician	2005	2006	2007	2008	2009	Grand Total
Tuomey Gastroenterology	Floyd Angus	437	667	504	438	326	2,372
	Kent Cunningham	616	804	821	720	534	3,495
	Scott R. McDuffie	740	1,047	937	817	530	4,071
	Ted Williams	494	681	611	524	346	2,656
Tuomey Gastroenterology Total		2,287	3,199	2,873	2,499	1,736	12,594
Tuomey OB/GYN	Barney Williams	132	192	117	94	98	633
	Helen Latham	126	167	149	84	47	573
	John Britton	64	108	100	87	55	414
	Murrell Smith	90	91	102	87	53	423
	Samuel Riddle	73	62	56	26	18	235
	Tessa Kincade	44	45	54	17		160
	Thomas Hepfer	66	63	40	35	10	214
Tuomey OB/GYN Total		595	728	618	430	281	2,652
Tuomey Ophthalmology	James Goodson	714	903	841	915	687	4,060
Tuomey Ophthalmology Total		714	903	841	915	687	4,060
Tuomey Surgical	Hans Brings	43	421	432	408	340	1,644
	Henry P. Moses	179	371	422	388	359	1,719
	James W. Ellett	81	132	1			214
	Jon Stanford	136	249	232	248	161	1,026
	Mark M. Crabbe	208	344	369	370	254	1,545
	Steven C. Lauzon			154	192	173	519
Tuomey Surgical Total		647	1,517	1,610	1,606	1,287	6,667
Grand Total		4,243	6,347	5,942	5,450	3,991	25,973

Table IV - Physician-Related Hospital Medicare Claim Counts

Respectfully submitted,



Ruben Steck

11/16/2009
Date

Attachment A – Physician List

Group Name	Medicare Group ID	Medicaid Group ID	Physician Name	Medicare Physician ID	Medicare Phsyician ID	Contract Date		
Tuomey Gastroenterology			Floyd Angus			1/1/2005		
			Kent Cunningham			1/1/2005		
			Scott R. McDuffie			1/1/2005		
			Ted Williams			1/1/2005		
Tuomey OB/GYN			Barney Williams			1/1/2005		
			Helen Latham			1/1/2005		
			John Britton			1/1/2005		
			Murrell Smith			1/1/2005		
			Samuel Riddle			1/1/2005		
			Tessa Kincade			1/1/2005		
			Thomas Hepfer			1/1/2005		
			James Goodson			1/1/2005		
Tuomey Ophthalmology			Hans Brings			9/1/2005		
Tuomey Surgical			Henry P. Moses			5/1/2005		
			James W. Ellett			5/1/2005		
			Jon Stanford			5/1/2005		
			Mark M. Crabbe			5/1/2005		
			Steven C. Lauzon			11/15/2006		

Attachment B – Curriculum Vitae

Ruben Steck
Steck Consulting, LLC

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 Washington, DC 20036
 (202) 887-0190
 rsteck@steckconsulting.com

Experience

Over twenty years experience providing innovative algorithmic and methodological solutions to clients' complex and large-scale data analysis challenges. Expertise in fraud and abuse detection and analysis for government and private health insurers, link analysis for law enforcement, defense and intelligence clients, and pattern analysis for financial, retail, and telecommunications clients. Expertise in developing parallel and distributed processing solutions using diverse methods such as graph-theoretic pattern detection and analysis, trend analysis, simulation, and modeling. Expertise in combining, integrating, and synchronizing large data sets from diverse sources to provide richer insights into clients' data. Expertise in presenting results of complex analyses in a variety of easy to understand graphical formats.

Employment

President

Steck Consulting, LLC

1991 - Present

- Providing custom consulting and data analysis services to a wide range of commercial and government clients. Performing large-scale data analysis to identify, classify, quantify, model and predict complex behavioral patterns across multiple large (multi-billion record) databases from diverse sources. Performing statistical and graph-theoretic analysis and modeling of the complex interactions of associated entities. Presenting complex analytic results in forms useful to consumers with little computer or data analysis experience. Maintaining and administering multi-terabyte parallel processing hardware and software systems to provide clients with high scalability and rapid turnaround times.
- Providing analysis services for the detection and prosecution of healthcare fraud and abuse. Services include complex pattern detection, statistical analysis, link-analysis, and damage/recovery calculations. Projects include large civil and criminal Medicare, Medicaid, and private sector cases with recoveries approaching \$2 billion.
- Providing software and analysis support to U.S defense and intelligence clients. Diverse projects include development of multi-terabyte linked transaction data for a national law enforcement test bed; multi-spectral image processing software for target detection and recognition; large-scale text search and pattern matching tools.
- Providing software and consulting services to commercial clients. Projects include algorithm design and development for a large international data services firm's multi-terabyte parallel data processing system. Services include large-scale population segmentation, modeling and risk management for financial, retail and telecommunications clients.

Partner, Manager of Analytic Services
 Sector Analytics, LLC

1996 – 1997

- Developed and implemented link analysis and pattern scoring algorithms for the detection of health care fraud and abuse. Responsible for interpreting commercial and government clients' fraud detection and reduction requirements and formulating, managing and implementing appropriate system solutions.

- Managed contracts to identify and characterize potential cases of fraud and abuse within public and private health care programs. Assisted clients in establishing investigative priorities by estimating potential financial recoveries.
- Designed and implemented scalable pattern detection and analysis software supporting very large databases. Developed graph-theoretic cluster detection and link analysis algorithms, propagative scoring techniques, temporal analysis schemes, and statistical behavior characterization tools.

Member of the Technical Staff
MRJ, Inc.

1987-1991

- Responsible for algorithm design and software development in a wide variety of applications of massively parallel supercomputers, traditional vector supercomputers, and a variety of special purpose systems for intelligence community, defense, and other classified government clients.
- Led team in the design and development of parallel algorithms and coordinated integration of parallel modules into large-scale database analysis system. Designed pattern detection and link analysis tools for large database containing complex relationships.
- Designed and developed tools for fine-grained parallel scientific computation including statistical analysis, genetic algorithms, simulated annealing, and Monte Carlo modeling for optical, electromagnetic, image processing, segmentation and classification, target recognition, and other application areas.
- As Principal Investigator on Scientific Visualization R&D project, developed tools to easily view and manipulate multi-million point FFTs and other large-scale signal data. Developed real-time, three-dimensional scene rendering software for polygonal and volumetric data.
- As Principal Investigator on stereo image analysis project, designed and developed image processing algorithms to analyze aerial stereo imagery of urban terrain to create three-dimensional topographic models of the scene.

Education

B.S., Computer Information Systems, George Washington University, 1987

Attachment C - List of Cases as Expert

I have testified as a summary witness in the following case:

United States v. Peter Rogan, et al.

Attachment D – Statement of Compensation

Under contract to the Department of Justice, to support this analysis, Steck Consulting, LLC has invoiced at the following rates:

<u>Labor Category</u>	<u>10/1/2007-9/30/2008</u>	<u>10/1/2008-Present</u>
Senior Analyst IV	\$187.20 per hour	\$197.60 per hour
Senior Analyst V	\$196.56 per hour	\$207.48 per hour

To date, Steck Consulting, LLC has submitted invoices totaling \$138,105.85.